CLAIMS:

1. A method of improving the output uniformity of a display device (1), comprising the following steps:
-detecting a first emitted brightness of at least one pixel (5) of display device (1);
-by means of the detected first brightness, determining the non-uniformity of an output of a driver circuit (3) being connected with said at least one pixel (5);
-based on said first detected brightness, generating a calibration factor for the at least one pixel (5), to be used to modify the output of the driver circuit (3), in order to improve the uniformity.

2. A method according to claim 1, wherein said display device is a self light emitting display device.

3. A method according to claim 1 or 2, wherein said display device is an organic light emitting diode based display device.

4. A method according to any one of the claims 1-3, further comprising the steps of:
-after detecting said first emitted brightness, adjusting an average display brightness, and thereafter detecting a second emitted brightness of said at least one pixel (5), and
-based on said first and second detected brightnesses, generating a calibration factor for the at least one pixel (5), to be used to modify the output of the driver circuit (3), in order to improve uniformity.

5. A method according to any one of the claims 1-4, wherein the step of detecting the emitted brightness of at least one pixel (5) is performed by means of an

external imaging system (2).

6. A method according to any one of the claims 1-5, wherein said driver circuit (3) is one of a pixel driver circuit or a data driver circuit.

7. A method according to any one of the claims 1-6, wherein said display device (1) is a active matrix polymer or organic light emitting diode display device.

8. A method according to claim 7, wherein the step of detecting the emitted brightness of at least one pixel (5) comprises the step of individually detecting the emitted brightness for each of a plurality of pixels.

9. A method according to claim 7 or 8, further comprising the step of aligning, in one of a column or a row of pixels, all transistors of all pixels in a direction, being the direction of a laser beam during a laser recrystallisation step during the fabrication of said transistors.

10. A method according to any one of the claims 1-6, wherein said display device (1) is a passive matrix polymer or organic light emitting diode display device.

11. A method according to any one of the claims 1-7 and 9-10, wherein the step of detecting the emitted brightness of at least one pixel (5) comprises the step of jointly measuring the emitted brightness of a group of pixels, such as a column or a row of pixels, being commonly controlled by a common driving device.

12. A method according to any one of the preceding claims, wherein said calibration factors are memorised in the driver circuit (3) by one of the methods; storing the calibration factors in a memory device, burning fuses on one of a transistor substrate or an additional driver integrated circuit, or laser trimming of one of a transistor substrate or an additional driver integrated circuit.

13. A system for calibrating a display device (1), for improving the output uniformity of the same, comprising a unit for holding a display device (1) to be calibrated, an imaging system (2), being positioned so as to, when in use, detect emitted brightness from the entire display device surface of the display device (1), and a feedback system (6), for transmitting information regarding the emitted brightness back to the display device (1), the system being arranged to perform the method according to any one of the claims 1-12.

14. A system according to claim 13, wherein said display device (1) is a self light emitting display device, preferably an organic light emitting diode based display device.

15. A self light emitting display device (1) for use with a system as defined in claim 13.

16. A self light emitting display device (1) as defined in claim 15, wherein the display device comprises a plurality of light emitting pixels being arranged in a row and column structure, wherein either each column or each row of pixels being connected with a data driver circuit, wherein each column or row comprises an additional non-light emitting pixel, incorporating a current measurement device, for monitoring a relative change over time of an output signal from said data driver.